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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,644	04/15/2004	Christopher J. Stone	D3125	8994

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EXAMINER

DALEY, CHRISTOPHER ANTHONY

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/825,644	Applicant(s) STONE, CHRISTOPHER J.	
	Examiner Christopher A. Daley	Art Unit 2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-20 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 20 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 14, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant uses the term "the serial bus having an architecture defined by an Institute of Electrical and Electronics Engineer ("IEEE")-1394 specification. Said specification comprises of many standards and a definite standard(s) of said specification is enabled need to be specified. Standards change over time, and with a specific standard established in specification, the embodiment is indefinite.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 –5,13-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Sun (US6826699). As is best understood, Sun shows all the claimed subject matter of the method and apparatus in said reference disclosure.

5. As to claim 1, Sun discloses a method for automatically establishing an isochronous signal for transmission to a signal receiving device, the method comprising: using a serial bus responsive to a set-top device and a first signal receiving device, the serial bus having an architecture defined by an Institute of Electrical and Electronics Engineers ("IEEE")-1394 specification, discovering a signal receiving capability of the first signal receiving device (Figure 2 illustrates a source 210, which can be a set top box, coupled to sink 220 via a IEEE 1394 bus. Said source device is capable of transmitting digital signal, such as a DTV signal which is inherently isochronous (Col. 5, line 49- COL.6, line 14). Figure 5, step 510 illustrates a configuration transaction between the sourcing device and the receiving device, COL. 7, lines 50 – 58); and without user intervention, based on the discovered signal receiving capability, producing an isochronous signal for transmission to the first signal receiving device over the serial bus (Figure 5 illustrate in steps 510 and 550 setting up and transmitting a isochronous signal over said IEEE 1394 bus, COL. 7, line 53 – COL. 8, line 40).

6. As to claim 2, Sun discloses the method according to claim 1, further comprising: transmitting the produced isochronous signal to the first signal receiving device over the serial bus (Figure 5, step 550 illustrates said limitation, Col. 8, lines 30 – 41).

7. As to claim 3, Sun discloses the method according to claim 1, further comprising: providing the serial bus between the first signal receiving device and a second signal receiving device (Figure 5, step 510 illustrate said limitation, Col. 8, lines 42 - 50); and

discovering a signal receiving capability of the second signal receiving device (Figure 5, step 550 illustrate said limitation, Col. 8, lines 42 - 50).

8. As to claim 4, Sun discloses the method according to claim 3, wherein the step of producing the isochronous signal for transmission comprises producing the isochronous signal for transmission to one of the first and second signal receiving devices (Multiple sink devices receive isochronous signals, Col. 8, lines 43 – 60).

9. As to claim 5, Sun discloses the method according to claim 4, wherein the set-top device supports a single isochronous point-to-point connection on the serial bus (Figure 2 illustrates a STB 210 coupled to sink device 220 over a point to point connection, COL, 6, lines 15 – 30).

10. As to claim 13, Sun discloses a computer-readable storage medium encoded with a computer program which, when loaded into a processor, implements the method of claim 1 (Figure 1 illustrates a RAM 102, which stores the computer program that executes said method, COL. 4, lines 55 – 67).

11. As to claim 14, Sun discloses an apparatus for automatically establishing an isochronous signal for transmission to a signal receiving device, the apparatus comprising: a computer-readable storage medium (Figure 1, unit 102, COL. 4, lines 60 – 67); and

a processor responsive to the computer-readable storage medium and to a computer program, the computer program, when loaded into the processor, operative to perform a method comprising: (Figure 1 illustrates processor 101 responsive to storage medium 102 that stores program that executes said method, (COL. 4, lines 60 – 67);

using a serial bus responsive to a set-top device and the signal receiving device, the serial bus having an architecture defined by an IEEE-1394 specification, discovering a signal receiving capability of the first signal receiving device (Figure 2 illustrates a source 210, which can be a set top box, coupled to sink 220 via a IEEE 1394 bus. Said source device is capable of transmitting digital signal, such as a DTV signal which is inherently isochronous (Col. 5, line 49- COL.6, line 14); and

without user intervention, based on the discovered signal receiving capability, producing an isochronous signal for transmission to the signal receiving device over the serial bus (Figure 5 illustrate in steps 510 and 550 setting up and transmitting a isochronous signal over said IEEE 1394 bus, COL. 7, line 53 – COL. 8, line 40).

As to claim 15, Sun discloses a set-top device for use within a broadband communications system, comprising: an interface to a serial bus, the serial bus responsive to a signal receiving device and having an architecture defined by IEEE-1394 specification(Figure 1 illustrates an interface 108 to serial bus 120. Said serial bus is connected to a sink device 220 as illustrated in figure 2. The architecture is IEEE 1394, COL. 6, lines 15 – 30); a processor (Figure 1, processor 101); a computer readable storage medium encoded with a computer program which, when loaded into the processor, is operative to perform a method comprising: discovering a signal receiving capability of the signal receiving device (Figure 1 illustrates processor 101 responsive to storage medium 102 that stores program that executes said method, (COL. 4, lines 60 – 67) ; and without user intervention, based on the discovered signal receiving capability, producing an isochronous signal for transmission to the signal receiving device via the interface to the serial bus (Figure 5 illustrate in steps 510 and 550 setting up and transmitting a isochronous signal over said IEEE 1394 bus, COL. 7, line 53 – COL. 8, line 40).

12. As to claim 16, Sun discloses the set-top device according to claim 15, wherein the set-top device comprises one of a cable set-top device and a terrestrial set-top device (Figure 1 illustrates a system that can take on a plurality of embodiments, such as cable or terrestrial set-top devices, COL. 4, lines 45 – 51).

13. As to claim 17, Sun discloses the set-top device according to claim 16, wherein the isochronous signal comprises a displayable digital television signal (Figure 1 illustrates a device that transmits digital content, that comprises a digital television signal for a on –screen display for sink device such as digital TV, COL. 4, lines 42 – lines 48).

14. As to claim 18, Sun discloses the method according to claim 17, wherein the displayable digital television signal comprises one of an on-screen display and a signal for recording by a recording device (Figure 1 illustrates a device that transmits digital content , that comprises a digital television signal for a on –screen display for sink device such as digital TV and a signal for a recording device such as a digital video cassette recorder, COL. 4, lines 42 – lines 52).

15. As to claim 19, Sun discloses the set-top device according to claim 16, wherein the signal receiving device comprises one of a display device; a digital video cassette recorder; a hard disk drive; a digital video camera recorder; and a digital video disk recorder (Figure 1 illustrates the plurality of receiving devices that comprises said devices, COL. 4, lines 45 – 52).

16. As to claim 20, Sun discloses the set-top device according to claim 19, wherein the broadband communications system comprises a cable television system (Figure 2

illustrates said cable television system comprising a communication network 200, COL. 5, line 63 – Col. 6, line 14).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 7 – 8, 10 - 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sun in view of Shintani et al (US2003/0067558) hereinafter Shintani.

19. As to claim 7, Sun does not disclose the method according to claim 1, wherein digital content is transmittable from the set-top device to the first signal receiving device via the serial bus, and wherein analog content is transmittable from the set-top device to the first signal receiving device via an analog interface.

However, Shatani teaches wherein digital content is transmittable from the set-top device to the first signal receiving device via the serial bus, and wherein analog content is transmittable from the set-top device to the first signal receiving device via an analog interface. One of ordinary skill in the art at the time of the invention to combine the teachings of Sun and Shintani because the analog signal provides on screen

information from a set top device to a HDTV device without greatly increasing the cost to the system, (page 2, paragraph 0013).

Figure 1 illustrates a set-top device that transmits a digital signal to a HDTV device, and also transmits a separate analog signal to said HDTV device.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Sun and Shintani because the analog signal provides on screen information from a set top device to a HDTV device without greatly increasing the cost to the system, (page 2, paragraph 0013).

The motivation for modifying Sun by Shintani would have been obvious because one having ordinary skill in the art would want to use display both analog and digital signal on HDTV unit, (page 2, paragraph 0013).

20. As to claim 8, Shintani discloses the method according to claim 7, further comprising: determining if the first signal receiving device is responsive to the analog interface (Figure 3 illustrates the signal receiving device receiving signal 170 from STB into multi-processor unit 390, that is sent to the HDTV monitor 380, page 3, paragraph 0031).

21. As to claim 10, Shintani discloses the method according to claim 8, wherein the step of determining comprises assuming the first signal receiving device is not

responsive to the analog interface (Auto detect device of 370 senses the presence or absence of analog signal, page 3, paragraph 0032).

22. As to claim 11 and 12, Shintani discloses the method according to claim 8, further comprising: when the first signal receiving device is not responsive to the analog interface, producing a message for transmission to the first signal receiving device over the serial Bus (An external trigger can be sent in the serial digital stream with requisite message, to be displayed on digital HDTV monitor, page 3, paragraph 0033).

23. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sun in view of Shintani and in further view of Van Vignau et al (US6359655) hereinafter Van Vignau.

24. As to claim 9, Shintani does not disclose the method according to claim 8, wherein the step of determining comprises measuring a resistance associated with the analog interface.

However, Van Vignau teaches the method according to claim 8, wherein the step of determining comprises measuring a resistance associated with the analog interface.

Figure 1 illustrates an analog interface coupled to a TV monitor, whose analog signal is controlled by software A/D converter, where the measurement of a resistor determines the signal capability, COL. 6, lines 15 – 35. Van Vignau delivers a means to control of video text for on screen, COL. 6, lines 58 – 65.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Sun/Shintani with Van Vignau as Van Vignau delivers a flexible means of controlling the analog interface, COL. 1, lines 6 – 13. One of ordinary skill in the art would be motivated to combine these teachings as there is a need that Van Vignau delivers to control of video text for on screen, COL. 6, lines 58 – 65.

The motivation for combining Sun/Shintani with Van Vignau would have been obvious because one of ordinary skill in the art would want a means to control the display of text on screen, Col. 6, lines 58 – 65.

Claim Objections

25. Claim 6 is objected to as being dependent upon a rejected base claim 1.

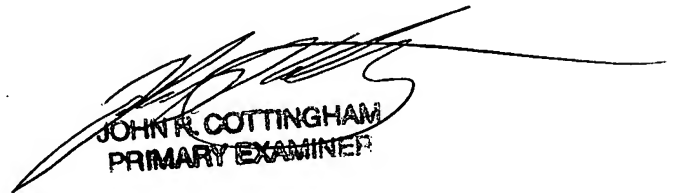
Conclusion

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Daley whose telephone number is 571 272 3625. The examiner can normally be reached on 9 am. - 4p m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAD
3/02/2006



JOHN R. COTTINGHAM
PRIMARY EXAMINER